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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/553,264

10/26/2006

Hikaru Ito

00684.109216

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7590

03/17/2008

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EXAMINER

JONES, JAMES

ART UNIT

PAPER NUMBER

2873

MAIL DATE

DELIVERY MODE

03/17/2008

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/553,264	Applicant(s) ITO ET AL.	
	Examiner JAMES C. JONES	Art Unit 2873	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 12/20/2007.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-11 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-6 and 9-11 is/are rejected.
- 7) ☒ Claim(s) 7 and 8 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 1-6 and 9-11 are rejected under 35 U.S.C. 102(e) as being anticipated by Kitano et al (20050052402) hereafter '402.

'402 disclose the limitation therein including the following:

Regarding claims 1 and 10 '402 discloses an electrophoretic display device, comprising: a first substrate and a second substrate which are disposed with a spacing therebetween (fig. 1c and 2, par. [0045]- [0048] "a1" and "a2" as the "first and second substrate"), a partition wall disposed in the spacing (fig. 1c, par. [0045] "a11" as the "partition wall"), electrophoretic particles sealed in a closed space, defined by the first and second substrates and the partition wall, (fig. 1c, par. [0045]- [0048] "a8" and "a7" as the "electrophoretic particles"), a first electrode disposed at a side surface of the closed space (fig. 2, par. [0045] "a5" as the "first electrode"), and a second electrode disposed at a bottom surface of the closed space (fig. 1c, par. [0046] "a6" as the "second electrode"), distribution of the electrophoretic particles in the closed cell being changed according to a voltage between the first and second electrodes to effect

display (par. [0042]-[0043]) , wherein the first electrode has an area substantially equal to or larger than an area of the second electrode (fig. 1c), and means for successively applying between the first and second electrodes a reset voltage and a writing voltage which have an identical amplitude and have polarities opposite to each other (fig. 1c and 2, par. [0045]- [0046]).

Regarding claim 2 '402 discloses a device according to claim 1, wherein the area of the first electrode is substantially not more than three times the area of the second electrode (fig. 1).

Regarding claim 3 '402 discloses a device according to claim 1, wherein the first electrode is disposed at opposite two side surfaces of the closed space (fig. 1).

Regarding claim 4 '402 discloses a device according to claim 1, wherein the first electrode is disposed at four side surfaces of the closed space (fig. 1).

Regarding claim 5 '402 discloses a device according to claim 1, wherein the first electrode is disposed at opposite two side surfaces of the closed space and at other opposite two side surfaces of the closed space, a side surface electrode for canceling an influence of an electric field, on an adjacent pixel, generated by the first and second electrodes is disposed (fig. 1 "a3" as the "side surface electrode").

Regarding claim 6 '402 discloses a device according to claim 1, wherein each of the first and second electrodes is coated with an insulating layer at a surface thereof (fig. 1, par. [0040]).

Regarding claim 9 '402 discloses a device according to claim 1, wherein the closed space has a ratio of width to length of not less than 1:3 at a top surface or a

bottom surface thereof.

Regarding claim 11 '402 discloses a device according to claim 10, wherein the reset voltage has a polarity for distributing the electrophoretic particles on the first electrode (fig. 1 and 2, par. [0045]- [0046]).

Claims 1, 6, and 10 are rejected under 35 U.S.C. 102(e) as being anticipated by Ishige (20050206995) hereafter '995.

'995 discloses the limitations therein including the following:

Regarding claims 1 and 10, '995 discloses an electrophoretic display device (fig. 9), comprising: a first substrate and a second substrate which are disposed with a spacing therebetween (fig.9 par. [0029]- [0030] [0080]-[0082] "1" and "2" as the "first and second substrate"), a partition wall disposed in the spacing (fig. 9), electrophoretic particles sealed in a closed space, defined by the first and second substrates and the partition wall, (fig. 9, par. [0029]- [0030] [0080]-[0082] "5" and "6" as the "electrophoretic particles"), a first electrode disposed at a side surface of the closed space (fig. 9, par. [0080] – [0082] "8" as the "first electrode"), and a second electrode disposed at a bottom surface of the closed space (fig. 9, par. [0080] – [0082] "7" as the "second electrode"), distribution of the electrophoretic particles in the closed cell being changed according to a voltage between the first and second electrodes to effect display (par. [0080]-[0082]) , wherein the first electrode has an area substantially equal to or larger than an area of the second electrode (fig. 9), and means for successively applying between the first and second electrodes a reset voltage and a writing voltage which have an identical amplitude and have polarities opposite to each other (fig. 9, par. [0080]- [0082]).

Regarding claim 6, '995 discloses a device according to claim 1, wherein each of the first and second electrodes is coated with an insulating layer at a surface thereof (fig. 9, par. [0080]- [0082]).

Allowable Subject Matter

Claims 7 and 8 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

The following is a statement of reasons for the indication of allowable subject matter: with respect to the allowable claims, none of the prior art either alone or in combination disclose or teach of the claimed combination of limitations to warrant a rejection under 35 USC 102 or 103. Specifically, in reference to claim 7 (and its dependent), none of the prior art either alone or in combination disclose or teach of the claimed electrophoretic display device specifically including, as the distinguishing features in combination with the other limitations the claimed " wherein when an intersection line is taken as a line of intersection of an extended plane of an electrode surface of the first electrode and an extended plane of an electrode surface of the second electrode, a distance from the intersection line to an edge of the first electrode surface closest to the intersection line is equal to a distance from the intersection line to an edge of the second electrode surface closest to the intersection line".

Response to Arguments

Applicant's arguments filed 12/20/2007 have been fully considered but they are not persuasive.

I. Applicant argues that Kitano fails to teach or suggest, a first electrode having an area substantially equal to or larger than an area of the second electrode. Furthermore, applicant states that the figure 2(b) and 2(c) show the array of positively charged particles a8 and negatively charged particles a7 with in the closed space are bunched in layers, suggesting that the first electrode has an area substantially less than the second electrode. However, the number of particles that directly touch electrode a6 and a5 are equivalent to the same number of particles that can directly touch electrode a4 suggesting that the combination of a5 and a6 areas are substantially equivalent to the area of electrode a4. Furthermore, focusing on figure 1(c) with electrode "a5" as the "first electrode" and "a6" as the "second electrode" it is clear from the figures that the area of the two electrodes are in fact equivalent.

Conclusion

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of

the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to JAMES C. JONES whose telephone number is (571)270-1278. The examiner can normally be reached on Monday thru Friday, 8 a.m. to 5 p.m. est. time.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ricky Mack can be reached on (571) 272-2333. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

JCJ
/James C. Jones/
Examiner, Art Unit 2873

/Jordan M. Schwartz/
Primary Examiner, Art Unit 2873

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